# LOGO CONNECTOR

## BACKGROUND OF THE INVENTION

The present invention relates generally to computer systems and, more specifically, to tablet computers having logos which operate as connecting terminals.

In the world of consumer electronic devices, there has been an ever-present demand for improved appearance, improved functionality, and improved aesthetics. Industrial design has become a highly skilled profession that focuses on fulfilling this need for enhanced consumer product appearance, functionality, and aesthetics.

Much of the aesthetic appeal of an electronic device or other consumer product may quickly be compromised if there are too many display elements, such as logos, lights, and indicators, for example, or if too much of the visible display area is occupied by display elements that are not needed or relevant at all times. When not needed, these "passive" or inactivated display elements, such as logos, may remain perceptible to the user, without other functionalities.

Therefore, it can be seen that there is a need for a tablet computer with logos that are both aesthetic pleasing and functional.

## SUMMARY

In one aspect, a connector system comprises a housing having a front side and a back side; a circuit hoard mounted within the housing; and a plurality of externally accessible connectors mounted on the circuit board within the housing, so that the plurality of externally accessible connectors extend from the plane of the circuit board and faces the back side of the housing, wherein the plurality of externally accessible connectors are arranged into at least one pattern, wherein the plurality of externally accessible connectors comprise a substantially flat metal plate.

In another aspect, an electronic computing device comprises a plurality of connectors disposed at an exterior surface of a housing of the electronic computing apparatus, the plurality of substantially flat connectors including at least a first set of connectors disposed at a first place of the external surface of the housing, and a second set of connectors disposed at a second place away from the first place of the external surface of the housing, wherein the plurality of connectors are arranged into a product logo.

In a further aspect, a mobile computing device comprises a housing having a front side and a back side, wherein the front side is adapted to receive a display screen; and a plurality of externally accessible connectors mounted on the back side of the housing, wherein the plurality of externally accessible connectors are arranged into a plurality of patterns, wherein the plurality of patterns comprise logos, wherein the plurality of externally accessible connectors are adapted to conduct power.

These and other features, aspects and advantages of the present invention will become better understood with reference to the following drawings, description and claims.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a tablet personal computer with a docking station according to an exemplary embodiment;

FIG. **2**A is a front view of a back side of a tablet personal computer of FIG. **1**;



FIG. **2**B is an enlarged front view of a logo of the tablet personal computer of FIG. **2**A according to an exemplary embodiment;

FIG. **2**C is an enlarged front view of another logo of the tablet personal computer of FIG. **2**A according to an exemplary embodiment;

FIG. **2**D is a cross-sectional view of the logo of the tablet personal computer taken along line **2-2** of FIG. **2**C according to an exemplary embodiment;

FIG. **3**A is a schematic view of a flexible printed circuit board used for the tablet personal computer of FIG. **1** according to an exemplary embodiment; and

FIG. **3**B is a cross-sectional view of the flexible printed circuit board taken along line **3-3** of FIG. **3**A according to an exemplary embodiment.

## DETAILED DESCRIPTION OF EMBODIMENTS

The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles, since the scope of the embodiments is best defined by the appended claims.

Various inventive features are described below that can each be used independently of one another or in combination with other features.

Broadly, exemplary embodiments comprise an aesthetically pleasing visual display that may be used as terminal connectors. More specifically, exemplary embodiments of a tablet PC may provide visual displays, such as trademark logos, which are used as terminal connectors. According to exemplary embodiments, a plurality of externally accessible connectors may be arranged into a pattern at a back side of the tablet PC. The logo connectors of tablet PC may be used in conjunction with a cradle or docking station. By putting the tablet PC on the cradle, batteries may be charged and data communication links may be established.

Referring to FIG. **1**, an electronic apparatus **10** may include a tablet personal computer (PC) **100** and a cradle **102**. The tablet PC **100** may be a computer system, such as one of the ThinkPad® series of personal computers sold by Lenovo (US) Inc. of Morrisville, N.C.

The tablet PC **100** may be, for example, a handheld computer, a server, a personal digital assistant, a cellular telephone, a network appliance, a camera, a smart phone, a network base station, a media player, a navigation device, an e-mail device, a game console, a television receiver (e.g., a satellite or cable television set-top box), a digital-video-recorder (DVR), an automatic teller machine (ATM), a security system (e.g., a door or gate access system), or a combination of any two or more of these data processing devices or other data processing devices. In other words, the device **100** may comprise any type of electronic device, general purpose computing device or special purpose computing device that includes a processor and other circuitry or logic operable to perform the pictorial authentication process described herein to control access to a secured item.

In some embodiments, the tablet PC **100** may include a housing **101**. The housing **101** may include a front side **103** and a back side **106**. The front side **103** may be adapted to receive a display screen, such as a touch sensitive screen **104**, for example. The tablet PC **100** may comprise other elements, parts or components not illustrated for the sake of brevity. The touch sensitive screen **104** may be implemented with liquid crystal display (LCD) technology, light emitting polymer